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# PRODUCTION INDICATORS OF BROILER CHICKENS FATTENING IN THE CIRCUMSTANCES OF A NEW APPROACH TO THE ORGANIZATION AND IMPLEMENTATION OF PREVENTIVE MEASURES ON FARMS IN MONTENEGRO

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## Abstract

This research is important because antibiotic resistance has increased worldwide. In addition to indiscriminate and inadequate use in human medicine, one of the reasons for this problem is the administration of antibiotics and other stimulant preparations, both for therapeutic and preventive purposes in veterinary medicine. With this experiment, we tried to prove that through the presented work methods, this use can be reduced and even completely stopped. The goal of this work was to prove that if we provide healthy one-day-old chicks with all the necessary zoohygienic housing conditions, especially microbiologically clean water and food of appropriate quality, we stimulate natural immunity, without the need to give preventive chemo pharmaceuticals.

Around 120,000 chickens, provenance Cobb 500, were fed with adequate feed mixtures. For preventive purposes, experimental chickens were treated with probiotic preparations the "Actiferm" line via drinking water, different from the chickens from the control group where they were administered antibiotics, liposoluble vitamines and other commercial nutritional supplements. During fattening, experimental chickens drank water in which Dioxy activ supra Aqua was dosed, while chickens from the control group drank water without liquid disinfection with this preparation. Investigated parameters were: fattening, vitality, mortality, feed conversion, final weight and EBI index, compared to chickens from the control group. During the fattening period, the number of dead individuals was entered daily in the farm sheets, which keep records of the number status, which at the end of fattening gave us an insight into the total mortality and final vitality in both groups. Finally, the total consumption of food and water, which is an integral part of the installed equipment, was calculated. The EBI index is calculated according to the universal formula (Average grams gained/day X % survival rate)/Feed Conversion X 10). The chickens were weighed on the slaughter line, which is an integral part of slaughterhouse records. All obtained data were processed using the Microsoft Excel 2010 computer package-arithmetic mean.

Analyzing the obtained results, it can be seen that chickens from the experimental group, unlike the control group, had a 37.7% lower mortality, a 59% higher EBI index, a higher final mass by about 24%, and a lower feed conversion by about 20 %,. The results show that experimental chickens had better fattening results, in terms of vitality, mortality, feed conversion, and final weight and EBI index, compared to chickens from the control group.

When water begins to be seen as an indispensable part of the daily meal, and not a transporter of chemopharmaceutical preparations, and all the requirements of good manufacturing practice are respected, we come to the conclusion that many preparations, which are given for preventive and therapeutic purposes, are not necessary, but are harmful to both chickens and the humans, consumers of their products.

***Key words**: Broilers, Drinking water, Biofilm, Liquid disinfection, Stable liquid chlorine dioxide, "Dioxy Activ Supra", "Actiferm".*